AF/2812

PTO/SB/21 (08-00)

TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number	09/412,512
Filing Date	October 5, 1999
First Named Inventor	Shunpei YAMAZAKI
Group Art Unit	2812
Examiner Name	R. Booth
Attorney Docket Number	0756-2046

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☒ Amendment / Reply
  - ☒ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Assignment Papers *(for an Application)*
- ☐ Drawing(s)
- ☐ Declaration and Power of Attorney
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)*
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosures
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Remarks

☒ The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 50-2280 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Eric J. Robinson, Reg. No. 38,285 Robinson Intellectual Property Law Office, P.C. PMB 955 21010 Southbank Street Potomac Falls, VA 20165
Signature	
Date	3-24-03

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on the date indicated below.

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Attorney Docket No. 0756-2046

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#25
Response
J. McCrindler
4/3/03

In re Patent Application of:	)	Group Art Unit: 2812
Shunpei YAMAZAKI	)	Examiner: Richard A. Booth
Serial No. 09/412,512	)	
Filed: October 5, 1999	)	
For: LIQUID CRYSTAL DISPLAY DEVICE,	)	
ACTIVE MATRIX TYPE LIQUID	)	
CRYSTAL DISPLAY DEVICE, AND	)	
METHOD OF DRIVING THE SAME	)	

CERTIFICATE OF MAILING
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Adele M Stamper
Adele M. Stamper

RESPONSE TO FINAL OFFICIAL ACTION

Honorable Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

The Final Official Action dated December 24, 2002, has been received and its contents carefully noted. This Response is filed within three months of the mailing date of the Official Action, and therefore Applicants respectfully submit that this response is timely filed without extension of time.

Claims 14-16, 18, 19, 31-36, 39, 40, 43, 44 and 47-57 are pending in the present application, of which claims 14-16, 18 and 19 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Applicants note with appreciation the consideration of the Information Disclosure Statements filed on October 5, 1999, November 23, 1999, April 2, 2001 and July 15, 2002.

The Official Action rejects claims 14-16, 18, 19, 31-36, 39, 40, 43, 44 and 53-57 as obvious based on the combination of JP 09-312260 to Hamatani et al. and U.S. Patent No. 5,236,850 to Zhang. The Official Action also relies on U.S. Patent No. 6,077,731 to Yamazaki et al. and asserts that it is equivalent to Hamatani. The

Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab,* 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Although Hamatani may show the steps of irradiating a semiconductor film which includes a metal element for enhancing crystallization with laser light and removing an oxide film from a surface of the semiconductor film by etching after the irradiation of the laser light, Hamatani does not show that an oxide film is formed by irradiation of a laser light, which is a feature of all the independent claims of the present invention. Rather, Hamatani shows eliminating an oxide film which is formed by thermal treatment in an oxidative atmosphere in the range of about 400 to 1100°C (see Yamazaki, col. 13, lines 29-63). In other words, Hamatani uses a furnace annealing method to form the oxide film. Zhang and Yamazaki do not cure the deficiencies in Hamatani. The Official Action relies on Zhang to teach sputtering in an inert atmosphere and on Yamazaki as an alleged equivalent of

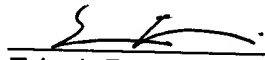
Hamatani. The prior art, whether taken alone or in combination, does not teach or suggest forming an oxide film by irradiation of a laser light. Since Hamatani, Zhang and Yamazaki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejection of claims 14-16, 18, 19, 31-36, 39, 40, 43, 44 and 53-57 under 35 U.S.C. § 103(a) is in order and respectfully requested.

The Official Action rejects dependent claims 47-52 as obvious based on the combination of Hamatani, Zhang, Yamazaki and U.S. Patent No. 6,146,930 to Kobayashi et al. Kobayashi does not cure the deficiencies in Hamatani, Zhang and Yamazaki as noted above. The Official Action relies on Kobayashi to teach the use of plastic substrates. Since the prior art does not teach or suggest forming an oxide film by irradiation of a laser light, a prima facie case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection of dependent claims 47-52 under 35 U.S.C. § 103(a) is in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,



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